



Annual Performance Report Form

Facility Name: Sanmina-SCI Corporation, Plant 432

Performance Track ID #: A080007

Annual Performance Report #: 1

Reporting Year: 2001

Due Date: July 1, 2002

Section A

General Facility Information

To the extent possible, EPA will pre-complete items A.1-A.8 for you. Please ensure that the information in A.1-A.8 below is accurate, complete, and up to date. Please supply or revise any information as necessary and then check the box to the left of the item(s) to indicate where changes have been made. Items A.9 and A.10 cannot be pre-completed; please respond as directed in A.9 and A.10 below.

Did you make changes? If so, check box.

- A.1 ☐ Name of your facility: Sanmina-SCI Corporation Plant 432
- A.2 ☒ Name of your parent company: Sanmina-SCI Corporation
- A.3 ☐ Facility contact person for the Performance Track program
Name: Mr./Mrs./Ms./Dr. Mrs. Mary Betsch
Title: Environmental Health and Safety Engineer
Phone: 719.382.2446 Fax: 719.382.2494 E-mail: Mary.Betsch@sanmina-SCI.com
- A.4 ☒ Facility's location
Street Address: 702 Bandley Drive
Street Address (cont.):
City/State/Zip Code: Fountain, CO 80817
- A.5 ☐ Facility's website address (if any): www.sanmina.com
- A.6 ☐ Number of employees (full-time equivalents) who currently work in the facility:
☐ Fewer than 50 ☐ 50 - 99 ☐ 100 - 499 ☐ 500 - 1000 ☒ More than 1000
- A.7 ☐ Does your company meet the Small Business Administration definition of a small business for your sector? ☐ Yes ☒ No
- A.8 ☐ North American Industrial Classification System (NAICS) Code(s) that are used to classify business at the facility: 3679 _____
- A.9 ☒ In your application and, perhaps, in previous annual performance reports, you described what your facility does or makes. Have there been any (additional) changes to your facility's list of products and/or activities? If so, please list them in the space below. ☒ Yes ☐ No
Boxbuild--System Assembly
- A.10 ☒ Please update the list of environmental requirements that apply to your facility. In the space below, indicate any changes that have taken place during this reporting period. If you have no changes to report, please write "No changes."
Wastewater Treatment Permit

Section B

Environmental Management System

B.1 Environmental Management System Assessment. Please summarize EMS assessments conducted *during the year*. Attach additional sheets as necessary.

a. Was an EMS audit or other assessment done by an independent third party?

☒ Yes ☐ No

If yes, please provide the *type* (e.g., ISO 14001 certification), the *scope*, and the *dates* (mo/yr) of each assessment.

02/2001; ISO 14001 Surveillance Audit: Verification of closure of non-conformities; Internal Audits; Nonconformance and Corrective Action; Policy; Management Review; Training, Awareness, and Competence; Communications; Emergency Preparedness and Response; Operational Control.

09/2001; ISO 14001 Surveillance Audit: Legal and Other Requirements; Environmental Aspects/Impacts; Policy; General Requirements; EMS Documentation; Objectives and Targets; Internal Audits; Nonconformance and Corrective/Preventive Action; Management Review; Structure and Responsibility; EMS Records; EMS Programs; Monitoring and Measurement; Document Control; Operational Control; Training and Awareness; Communication; Emergency Preparedness and Response.

b. Was an internal or corporate EMS audit conducted? ☒ Yes ☐ No

If yes, please provide the *scope* and the *dates* (mo/yr) of each audit.

12/2001: Non-conformances identified by Third Party audit in September 2001 and Internal Audit July 2001; Recycling

07/2001: Non-conformances (Plant 12 and 22) identified by Third Party audit in February 2001; Management Review

c. Was a compliance audit conducted? ☒ Yes ☐ No

If yes, please provide the *scope* and the *dates* (mo/yr) of each audit, and indicate *who* conducted the audit(s) (e.g., facility staff, corporate groups, third party).

Annually in November a Compliance Evaluation is conducted to ascertain permit requirements and/or new requirements or legislation forthcoming. Performance is tracked to permit requirements. Internal Audits may include regulatory aspects to ensure legal compliance and area inspections may prompt investigation of regulations for legal compliance. In CY2001, Mary Betsch of the EHS Group conducted the annual Compliance Evaluation.

d. (Optional) If you would like to describe any other audits or inspections that were conducted at your facility, please do so here.

Colorado Department of Public Health and Environment inspected Plant 432 to determine compliance with the generator requirements of the Colorado Hazardous Waste Regulations (6 CCR 1007-3).

No violations were documented.

Section B

(continued)

B.1

e. Briefly summarize corrective actions taken and other improvements made as a result of your EMS assessments and compliance audits.

Findings are tracked in the company Corrective Action Report indicating root cause, corrective action, and implementation schedule. All non-conformances identified through internal or external audits have been corrected to date.

Initiates resulting in improvements of the EMS include:

Closed-loop wastewater recycling system

Reduced 50% solvent consumption by implementing a trigger grip system for cleaning boards

Initiated a procedure for controlling chemicals introduced into the plant

Developed a "Needs Analysis" for determining the environmental training for all job-types

Purchased desk-top containers for recycling solder wick, solder tips, swabs, etc.

Purchased ~80,000 lbs of recycled paper with 30% post-consumer content

Initiated a contract to reclaim precious metals from solder paste, swabs, and wipes

Initiated recycling of 18 new materials

Purchased zinc plated steel shotgun shot rather than lead for bean bags to hold down components

Numerous procedure changes were made to further clarify and document the EMS process

f. Has your facility corrected all instances of potential non-compliance and EMS non-conformance identified during your audits and other assessments?

☒ Yes ☐ No ☐ No such instances identified

If no, please explain your plans to correct these instances.

g. When was the last Senior Management review of your EMS completed? *mo/yr* 01/2002

Who headed the review?

Name: Mr./Mrs./Ms./Dr. Mrs. Mary Betsch

Title: Environmental Health & Safety Engineer

Section B

(continued)

B.2 ISO 14001 Certification. Is your facility currently certified to ISO 14001? ☒ Yes ☐ No

B.3 Environmental Aspects Identification. When did your facility last conduct a systematic identification and/or review of your environmental aspects? *mo/yr 12/2001*

B.4 Progress Toward Achieving Objectives and Targets. In the table below, please provide a narrative summary of progress made toward EMS objectives and targets. **You may limit the summary to environmental aspects that are *significant* and towards which *progress* has been made during the *reporting year*.** In cases where progress relates specifically to a Performance Track performance commitment, complete the *Environmental Aspect* column, but in the *Progress* column simply refer to the performance commitment tables in Section C, i.e. "See Section C." Attach additional sheets as necessary.

<i>Environmental Aspect</i>	<i>Progress Made This Year</i> (e.g., quantitative or qualitative improvements, activities conducted)
Air Emissions	See Section C
Recycled/Reused Materials Use	See Section C
Hazardous Materials Use	See Section C
Hazardous Solid Waste	See Section C

Wastewater	<p>Installed a closed-loop wastewater recycling system to: (1) Improve the quality of process water; (2) Eliminate scale build-up on printed circuit boards; (3) Conserve natural resources by reducing energy and water consumption; and (4) Maintain ISO 14001 certification to continual improvement and prevention of pollution.</p> <p>The EPA issued a proposed rule under the CWA for the Metal Products and Machinery Point Source Category requiring stricter guidelines for discharging of pollutants, specifically lead. The existing levels are 0.68 mg/L and the new guidelines will limit lead discharge to 0.04 mg/L. Installation of the recycling system will position Sanmina-SCI for compliance when the legislation is effective as zero lead-bearing effluent will be discharged to the POTW.</p> <p>The virtues of a closed loop in-line cleaning process include zero effluent discharge, heat recovery, minimal water consumption, and low cost DI water with definitive process control. Additional benefits include elimination of defoamer, and reduced sock filter use and disposal as the previous process discharged directly to drain through pressure filtration.</p> <p>Installation of the wastewater recycling system saved approximately 44,100 kWh/year in energy and 1,480,600 gals/year of water/sewer for a combined cost savings of \$44,000/year.</p>

Section C

Environmental Performance Commitments

Please use the tables on pages 6-9 to summarize your facility's environmental performance against your Performance Track performance commitments. Complete only those boxes related to the baseline, current year, and performance commitment. If any of the boxes have been pre-completed for you, please verify the information. If you find information that is incorrect, cross it out and write in the correct information. **Leave blank any columns for future reporting years.**

C.1

Performance Commitment 1

a. Use this table to report data related to your first performance commitment.

Category (see page 16 of the instructions): Air Emissions

Aspect (see page 16 of the instructions): Emissions of Ozone-Depleting Gases

	<i>Baseline (as stated in your application)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Performance Commitment (the goal stated in your application)</i>
<i>Calendar Year</i>	1999	2001			2003
<i>Actual Quantity (per year)</i>	14,020	9,240			(optional)
<i>Measurement Units</i>	lbs.				
<i>Normalizing Factor*</i>	1.0	0.87			(optional)
<i>Basis for your Normalizing Factor*</i>	Number of Employees				
<i>Normalized Quantity* (per year)</i>	14,020	10,620			0

*See pages 17-19 of the instructions for more information

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

Analyzed 21 environmentally safe alternatives to the HCFC 141(b) Each MSDS and sample was evaluated for (1) Price; (2) Performance; and (3) Environmental Health and Safety. As a result of the study, it was determined most economical to continue using the HCFC 141(b) until it is phased out in 2003. A new objective and target has been established to identify the alternative product by 12/02. Identified the trigger grip solution to save 50% in solvent consumption saving \$25,000 annually. The trigger grip system has been implemented.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

Section C

(continued)

C.2

Performance Commitment 2

a. Use this table to report data related to your second performance commitment.

Category (see page 16 of the instructions): Waste					
Aspect (see page 16 of the instructions): Amount Recycled					
	<i>Baseline (as stated in your application)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Performance Commitment (the goal stated in your application)</i>
<i>Calendar Year</i>	2000	2001			2003
<i>Actual Quantity (per year)</i>	648,700	721,957			(optional)
<i>Measurement Units</i>	lbs.				
<i>Normalizing Factor*</i>	1.0	1.06			(optional)
<i>Basis for your Normalizing Factor*</i>	Number of Employees				
<i>Normalized Quantity* (per year)</i>	648,700	681,091			713,570 lbs Solid Waste
*See pages 17-19 of the instructions for more information					

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

The numbers above reflect quantity of waste recycled. More waste is recycled then shipped offsite for landfill disposal. In CY 2001, Sanmina-SCI employees recycled 361 tons of materials that would have otherwise been disposed of in the landfill. Initiated recycling of over 15 additional items for a total of 28 items currently recycled throughout the plant. A recycling objective was identified to increase recycling by 10% from the 2000 baseline. This objective was missed by a small margin due to production decreases. All employees were trained in EMS and 1 module was devoted to recycling. Maps of all the recycle locations were developed and posted throughout the plant and in the Recycle procedure.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

Section C

(continued)

C.3 Performance Commitment 3

a. Use this table to report data related to your third performance commitment.

Category (see page 16 of the instructions): Materials Use					
Aspect (see page 16 of the instructions): Hazardous Materials Use					
	<i>Baseline</i> (as stated in your application)	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Performance Commitment</i> (the goal stated in your application)
<i>Calendar Year</i>	2000	2001			2003
<i>Actual Quantity</i> (per year)	37	28			(optional)
<i>Measurement Units</i>	Types of hazardous substances				
<i>Normalizing Factor*</i>	1.0	N/A			(optional)
<i>Basis for your Normalizing Factor*</i>	Number of Employees				
<i>Normalized Quantity*</i> (per year)	37	28			
*See pages 17-19 of the instructions for more information					

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

The goal of this initiative was to evaluate all the MSDS's to determine the hazardous chemicals used onsite and then identify any non/less hazardous substitutes that could be used in place of the hazardous material. In cooperation with Maintenance and Janitorial, assessed all MSDS's for less-non hazardous chemical alternatives. Thirty-four Maintenance chemical alternatives and 20 Janitorial alternatives were evaluated. Implemented recommended substitutes and established an SOP for introducing new products onsite. No chemicals are allowed into the plant until the MSDS is first analyzed and waste disposal practices identified. The Janitorial Department initiated purchasing in bulk concentrate with a distribution system saving 25% in materials.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

Section C

(continued)

C.4

Performance Commitment 4

a. Use this table to report data related to your fourth performance commitment.

Category (see page 16 of the instructions): Waste

Aspect (see page 16 of the instructions): Hazardous Waste

	<i>Baseline (as stated in your application)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Performance Commitment (the goal stated in your application)</i>
<i>Calendar Year</i>	2000	2001			2003
<i>Actual Quantity (per year)</i>	46,355	24,779			(optional)
<i>Measurement Units</i>	lbs.				
<i>Normalizing Factor*</i>	1.0	1.06			(optional)
<i>Basis for your Normalizing Factor*</i>	Number of Employees				
<i>Normalized Quantity* (per year)</i>	46,355	23,376			41,700

*See pages 15-17 of the instructions for more information

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

Solder dross is generated from soldering operations and liquid hazardous waste consisting of fluxes and isopropyl alcohol. A Pollution Prevention Opportunity Assessment (P2OA) was conducted on the Wave Process. A P2OA is a systematic approach used to evaluate input materials of a process, identify waste exiting the process, and generate and evaluate options for pollution prevention (P2) through a cost-benefit analysis. The assessment uncovers opportunities to improve performance and profits while minimizing environmental impacts. One of the P2 opportunities evaluated was Solder Dross Reclamation.

Approximately 234,245 lbs/year of bar solder is purchased with 196,600 lbs/year of dross generation sent offsite for recycling. It was recommended to remelt the dross at 310oC followed by mechanical compression to separate the liquid metal from the solid oxide components. The resulting solder would be returned to the solder pot as reusable raw material in the form of an ingot. The processing of the ingots takes approximately 10 minutes. Over 60% (by weight) of the material is recovered which leads to a ~50% savings in solder purchases. No additives are necessary as the solder is the same chemistry as the solder pot. The chart below describes the actual solder recovery rates achieved at Plant 432.

The Solder Recovery System (SRS) turns dross from normal wave soldering processes into reusable solder. One of the wastes generated from wave soldering is large quantities of dross which must be removed at intervals and the bath replenished with expensive virgin solder. Analysis of the dross revealed that it consisted of a mixture of oxides and metallic solder with normally more than 90% solder.

The SRS mechanically separates the unreacted metal so that it can be returned to the bath, reducing the quantities of virgin solder purchased. The machine operates by remelting the dross followed by mechanical compression against a perforated wall, so as to squeeze the liquid metal out from the solid oxide component.

Previously, the solder dross was disposed of in 30-gallon drums and sent offsite for recycling. In 2000, Sanmina-SCI generated 196,600 lbs of dross. The SRS recycles the material onsite and the pure solder ingots are returned to the solder bath. The following tables illustrate the waste reduction and cost savings associated with reusing this material in-house. The SRS achieves 147,450 lbs reduction in solder bar purchases for a total annual cost savings of \$79,475.

After the initial analysis was conducted, Sanmina-SCI tested the equipment onsite for 30 days. The test was conducted primarily on 1 line with a sample drawn weekly. Each of the alloys were analyzed and the results indicated that all the metals were within the acceptable limits.

The project was presented to Sanmina-SCI's Top Management, including the Plant Manager who gave authorization for implementation. The SRS reduced Sanmina-SCI's environmental impact as ~60% of the dross is reused back into the process, thereby eliminating 50% in product purchases.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

Section D

Public Outreach and Performance Reporting

D.1 Please briefly summarize the public outreach and reporting activities that your facility has conducted during the year. Feel free, but not obligated, to attach supporting materials (e.g., meeting agendas, public announcements).

Over 200 adults and children attended Sanmina-SCI's first Earth Day celebration held at El Pomar Youth Sports Complex where 1,000 seedlings and 5 large trees were planted to enhance the environment. Sanmina-SCI partnered with the following organizations: City of Colorado Springs Forestry; El Pomar Youth Sports Park; Pikes Peak Greenway Committee; Harrison School District 2; Great Outdoors Colorado; and Mountain High Tree Service. The following activities were coordinated: (1) Signs/Banners; (2) Logo; (3) Media Participation; (4) Crew Leaders; (5) Volunteers; (6) T-Shirts; (7) Food; (8) Tree Planting Plan; (9) Seedling/Tree Purchases; (10) Children's Games; (11) Softball Game; (12) Communication/Map; (13) Registration; (14) Cleanup; and (15) Tree Planting Training.

The Earth Day Celebration continued in 2002. Over 110 people attended this year's Earth Day event in Wildflower Park where employees and their families planted 1,000 seedlings in the rain/snow. Sanmina-SCI received \$1,500 in sponsorship. The media coverage included 1 newspaper article prior to Earth Day and 2 television announcements after the event.

D.2 Please indicate which of the following methods your facility plans to use to make its Performance Track Annual Performance Report available to the public. Please check as many as are appropriate.

☐ Website (URL)

☐ Open House

☐ Meetings

☐ Press Releases

☐ Community Advisory Panel

☒ Other The report will be available in the lobby

Section E

Self-Certification of Continued Program Participation

On behalf of Sanmina-SCI Corporation Plant 432,
(name of my facility)

I certify that

- ◆ I have read and agree to the terms and conditions specified in *the National Environmental Performance Track Program Guide*. This facility, to the best of my knowledge, continues to meet all program criteria;
- ◆ I have personally examined and am familiar with the information contained in this Annual Performance Report. The information contained in this report is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete;
- ◆ My facility has an environmental management system (EMS), as defined in the Performance Track EMS criteria, including systems to maintain compliance with all applicable federal, state, tribal, and local environmental requirements in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;
- ◆ My facility has conducted an objective assessment of its compliance with all applicable federal, state, tribal, and local environmental requirements; and the facility has corrected all identified instances of potential or actual noncompliance; and
- ◆ Based on the foregoing compliance assessments and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.

I agree that EPA's decision whether to accept participants into or remove them from the National Environmental Performance Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior manager with responsibility for the facility and am fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is part of the National Environmental Performance Track program.

Signature/Date _____

Printed Name Mr./Mrs./Ms./Dr. Mr. Steve Korn

Title Vice President/Plant Manager

Phone Number/E-mail Address 719.382.2244

Facility Name Sanmina-SCI Corporation Plant 432

Facility Street Address 702 Bandley Drive; Fountain, CO 80817

Performance Track Identification Number A080007

Paperwork Reduction Act Notice

The public reporting and recordkeeping burden for this collection of information is estimated to average 188 hours per respondent annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.